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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,138	05/31/2006	Dwight K. Buckle	19350-103922	2005
28886	7590	05/18/2009		
CLARK HILL, P.C. 500 WOODWARD AVENUE, SUITE 3500 DETROIT, MI 48226			EXAMINER COMSTOCK, NATHAN	
			ART UNIT 4132	PAPER NUMBER
			MAIL DATE 05/18/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/581,138

**Applicant(s)**

BUCKLE ET AL.

**Examiner**

NATHAN E. COMSTOCK

**Art Unit**

4132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF 298)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.
2. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.
3. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-5, 14-15, and 22, drawn to a steam chest molded article or an energy absorbing element.

Group II, claim(s) 6-13, drawn to a steam chest mold apparatus.

Group III, claim(s) 16-21, drawn to a process for making a steam chest molded product.

4. The inventions listed as Groups I, II, and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Groups I and II share the common and/or corresponding technical features of a steam chest molded article/energy absorbing element molded from an expandable plastic material comprising a molded feature out of die draw. Groups I and III share the common or corresponding technical features of a steam chest molded article molded from an expandable plastic material comprising a molded feature out of die draw. Groups II and III share the common and/or corresponding technical features of a molded article having at least one out of die draw feature, and a steam chest mold apparatus comprising a first mold portion and a corresponding second mold portion for defining a mold cavity therebetween, and a means for introducing an expandable plastic material into the mold cavity, and a cavity pull system for forming at least one out of draw die feature.

5. However, in order to be considered a common special technical feature, any such feature must be novel and non-obvious. The above described technical features are not novel and non-obvious. U.S. Pat. App. Pub. No. 2003/0111852 to Carley et al. discloses a steam chest molded article/energy absorbing element (vehicle energy absorber system 10, paragraph [0088]) molded from an expandable plastic material (molded bead foam 14, paragraph [0089] and EPP, paragraph [0107]). Carley also discloses a molded article (vehicle energy absorber system 10, paragraph [0088]) and a steam chest mold apparatus (tooling configuration 24, paragraph [0094]) comprising a first mold portion (male mold half 30, paragraph [0095]) and a corresponding second mold portion (female mold half 32, paragraph [0095]) for defining a mold cavity (mold cavity 34, paragraph [0095]) therebetween, and a means for introducing an expandable plastic material into the mold cavity (bead injectors 26, paragraph [0094]).
6. Carley does not explicitly disclose that the steam chest molded article/energy absorbing element comprises a molded feature out of die draw. Carley also does not explicitly disclose a cavity pull system for forming at least one out of die draw feature.
7. Injection Mould Design by R.G.W. Pye (hereinafter "IMD") discloses injection molding processes, dies and molded articles having out of die draw features (chapter 9, pages 301-339). Specifically, IMD discloses a molded article comprising a molded feature out of die draw (See figs. 9.2 and 9.3, pages 302-303, which disclose numerous molded articles having out of die draw features). IMD also discloses a molding apparatus comprising a cavity pull system for forming at least one out of die draw feature (side cavity/side core systems, see fig. 9.2 and 9.5, pages 302 and 305, and fig. 9.24, page 324).

8. It would have been obvious to one of ordinary skill in the art to use the out of die draw molding techniques described in IMD to allow for the creation of out of die draw features in the steam chest molded article/energy absorbing element and molding die and process of Carley.

One of ordinary skill in the art would have been motivated to modify the steam chest molded article/energy absorbing element and molding die and process of Carley in this way in order to allow for the formation of out of die draw features, which IMD discloses can reduce the number of successive operations required to produce final articles, which reduces costs (page 303, second paragraph).

9. Because all of the common technical features between groups I and II, groups I and III, and groups II and III are disclosed within the prior art, such common technical features cannot be special technical features under PCT Rule 13.2. As a result, the claims corresponding to Groups I, II, and III lack unity of invention.

10. A telephone call was made to Applicants' representative, Jay Paranjpe, on May 11, 2009 to request an oral election to the above restriction requirement, but did not result in an election being made.

11. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

12. The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

13. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

14. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

15. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained.

Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double

patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

### **CONCLUSION**

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN E. COMSTOCK whose telephone number is (571) 270-1133. The examiner can normally be reached on Monday through Thursday, 8am-5pm Eastern Standard Time.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lavilla can be reached on (571) 272-1539. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N.E.C./  
Nathan E. Comstock  
Patent Examiner, Art Unit 4132  
12 May 2009

**/Michael La Villa/  
Michael La Villa  
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14 May 2009**